

CLASS EXERCISES

For what values of the variables is each expression undefined?

1. $\frac{7x^2y}{3xyz}$

2. $\frac{3x(x-5)}{2x(x+2)}$

3. $\frac{2x^2 + 3xy - 2y^2}{6x^2 - x - 1}$

Simplify.

4. $\frac{10x^2y}{15xy^2}$

5. $\frac{6x-12}{18x-36}$

6. $\frac{4y-8}{8-4y}$

7. $\frac{y^2-1}{2y+2}$

8. $\frac{x^2+5x+6}{x^2+6x+9}$

9. $\frac{y^2-5y+6}{y^2-4}$

10. $\frac{4x^2-9}{4x+6}$

11. $\frac{2x-4}{x^2+3x-10}$

12. $\frac{2x^2-3x-2}{x^2-5x+6}$

Algebra 2

Unit #6 - WS #1

PRACTICE EXERCISES



Use technology where appropriate.

Simplify.

1. $\frac{15x^4y^5}{5x^3y^2}$

2. $\frac{32x^5y^3}{40x^3y^2}$

3. $\frac{3x^3y^4}{6x^2y^5}$

4. $\frac{-6x^2y^4}{9xy^3}$

5. $\frac{12x^3y^6}{8x^4y^7}$

6. $\frac{-28x^5y}{35x^6y^2}$

7. $\frac{5x-15}{2x-6}$

8. $\frac{4y-8}{8y-16}$

9. $\frac{7x-28}{3x-12}$

10. $\frac{3x-6}{6-3x}$

11. $\frac{4x-8}{4-2x}$

12. $\frac{7x-56}{40-5x}$

13. $\frac{2y}{y^2-2y}$

14. $\frac{3x^2}{x^2-5x}$

15. $\frac{2x+10}{x^2+10x+25}$

16. $\frac{3x^2-2x}{6x-4}$

17. $\frac{2x^2-72}{x^2+3x-18}$

18. $\frac{3x^2-27}{x^2-x-12}$

19. $\frac{5x^2-20}{x^2-5x-14}$

20. $\frac{x^2+2x-3}{x^2+6x+9}$

21. $\frac{y^2+2y-15}{y^2+y-12}$

22. $\frac{y^2+4y-21}{y^2+2y-35}$

23. $\frac{x^2+4x+4}{x^2-4}$

24. $\frac{x^2-25}{x^2+10x+25}$

25. $\frac{y^2-49}{y^2-14y+49}$

26. $\frac{x^2-6x+9}{x^2+x-12}$

27. $\frac{x^2+8x+16}{x^2-2x-24}$

For what values of the variables is each expression undefined?

28. $\frac{5y-45}{y^2-6y}$

29. $\frac{5x^2-20x}{3x^2-18x+24}$

30. $\frac{4y^2+4y-24}{3y^2-27}$

Simplify.

31. $\frac{6x^2-7x+2}{6x^2+5x-6}$

32. $\frac{8x^2-10x+3}{6x^2+3x-3}$

33. $\frac{x^2+6xy+5y^2}{x^2-y^2}$

34. $\frac{x^2-3xy-4y^2}{y^2-x^2}$

35. $\frac{2x^2+8xy+8y^2}{3x^2+9xy+6y^2}$

36. $\frac{2x^2-10xy+12y^2}{2x^2-18y^2}$

37. $\frac{2x^2-8x-42}{-x^2-6x-9}$

38. $\frac{-2y^2-8y+24}{2y^2-8y+8}$

39. $\frac{5y^3-45y}{6-y-y^2}$

40. $\frac{-8+6x-x^2}{2x^3-8x}$

41. $\frac{xy^3-9xy}{12xy^2+12xy-144x}$

42. $\frac{x^2y^2+3xy^2+2y^2}{-5x^2y^4+20y^4}$